UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/330,755	06/11/1999	STUART B. BERMAN	223/279	9796

7590 10/14/2005

David B Murphy
O'MELVENY & MYERS LLP
Suite 100
114 Pacifica
Irvin, CA 92618

EXAMINER	
RYMAN, DANIEL J	

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/330,755	BERMAN, STUART B.	
	Examiner	Art Unit	
	Daniel J. Ryman	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *50,51,53 and 54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *50,51,53 and 54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Examiner acknowledges Applicant's filing of an RCE on 7/12/2005.

2. Applicant's arguments with respect to claims 50, 51, 53, and 54 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. Claim 54 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 54 discloses that the detectable signal is tag bits; however, claim 53 was amended to include the limitation that the detectable signal is tag bits. Therefore claim 54 fails to further limit claim 53.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 50, 51, 53, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al (USPN 5,592,160) in view of Gulick (USPN 4,809,269) in further view of Lowell (USPN 5,341,476) in further view of Crayford et al. (USPN 6,151,316).

6. Regarding claims 50, 53, and 54, Bennett discloses a method and a port control module (ref. 340) for use in a fiber channel switching fabric comprising (col. 4, lines 22-45): a fiber

channel input/output port for connection to a link (col. 1, line 57-col. 2, line 5), an encoder/decoder in communication with the input/output port (col. 2, lines 37-63) where "encoding" and "decoding" indicates the presence of an encoder/decoder, and a buffer (col. 2, lines 15-22 and col. 4, lines 39-45); where the module places received fiber channel data in the buffer before sending the data to another module (col. 2, lines 15-18), and monitors the buffer for an overflow condition (col. 5, lines 49-66) with an overflow buffer indicating a monitoring of an overflow condition. Bennett also discloses buffer overrun prevention (ref. 436, overflow buffer) (col. 5, lines 58-66).

Bennett does not expressly disclose the inclusion of buffer overrun prevention logic between the encoder/decoder and the buffer. Gulick teaches, in a port controller, having buffer overrun prevention logic before the buffer (col. 30, lines 25-39). Since the buffer overrun prevention logic is before the buffer, an obvious place to locate it would be between the buffer and the encoder/decoder. Gulick uses the buffer prevention logic in order to signal the system to terminate a packet that has been corrupted by buffer overflow through the use of tags (col. 30, lines 34-39). It would have been obvious to one of ordinary skill in the art of data communications to include buffer prevention logic before the buffer and to tag words that overrun the buffer in order to signal the system to terminate a packet that has been corrupted by buffer overflow.

Bennett in view of Gulick does not expressly disclose the buffer overrun prevention logic tags, but does not terminate, words that overrun the buffer. Lowell discloses in a buffering system that a variety of overflow buffer configurations are possible, including a "Reject" type of buffering in which the newest data in the buffer is overwritten by the overflow data (col. 3, lines

31-33; col. 7, lines 4-25, esp. col. 7, lines 15-25; and col. 8, lines 50-66). It is obvious that by using a "Reject" type of buffering that the port control module of Gulick is relieved of the need to terminate packets. Instead, once an overflow is detected, the port control module simply needs to flag the packets that are in overflow and pass the packets to the buffer where all overflowed packets will be terminated when a newer overflowed packet overwrites it. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have the buffer overrun prevention logic tag, but not terminate, words that overrun the buffer in order to relieve the prevention logic of the task of terminating the packet before it reaches the buffer.

Bennett in view of Gulick in further view of Lowell does not expressly disclose that the buffer overrun prevention logic sets tag bits to a unique value indicative of an overrun condition. However, Bennett in view of Gulick in further view of Lowell does disclose tagging a packet in order to signal the system to terminate a packet that has been corrupted by buffer overflow (Gulick: col. 30, lines 25-39). In spite of this, the tagging of Bennett in view of Gulick in further view of Lowell only signals the switching system rather than other network elements regarding the status of the buffer. Crayford teaches, in a switching system, using an overflow tag to signal other network elements regarding possible data loss due to the overflow (col. 12, lines 56-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the buffer overrun prevention logic set tag bits to a unique value indicative of an overrun condition in order to signal other network elements that the data packet could have been corrupted due to a buffer overrun.

7. Regarding claim 51, Bennett in view of Gulick in further view of Lowell in further view of Crayford discloses that the buffer is FIFO (Bennett: col. 2, lines 60-63; Gulick: col. 30 lines 25-27; and Lowell: col. 7, lines 15-20).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 7:00-4:30 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DJR

Daniel J. Ryman
Examiner
Art Unit 2665

HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600